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C. IRVIN MCCLELLAND
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER
DWIVEDI, MAHESH H

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/720,787	TREPESS, DAVID WILLIAM
	Examiner	Art Unit	
	Mahesh H. Dwivedi	2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 September 2006</u>.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27 and 29-34* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27 and 29-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>24 November 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☒ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1:     Receipt of Applicant's Amendment, filed on 09/08/2006, is acknowledged. The amendment includes amending the specification, amending claims 1-21, 26, and 29, and the cancellation of claim 28.

Priority

2.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

3.   The objections raised in the office action mailed on 05/08/2006 have been overcome by the applicant's newly submitted abstract received on 09/08/2006.

Claim Rejections - 35 USC § 112

4.   The rejections raised in the office action mailed on 05/04/2006 have been overcome by the applicant's amendments received on 09/08/2006.

Claim Objections

5.   Claim 27 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The examiner notes that parent claim 26 already defines the medium as a **"storage medium"**.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
>
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
>
> the prior art are such that the subject matter as a whole would have been obvious at the time the
>
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
>
> Patentability shall not be negatived by the manner in which the invention was made.

7.   Claims 1-7, 9-11, and 14-27, and 29-34 are rejected under 35 U.S.C. 103(a) as

being unpatentable over **Kohonen et al.** (Article entitled "Self Organization of a Massive

Document Collection") and in view of **Derthick** (Article entitled "Interfaces for Palmtop

Image Search").

8.   Regarding claim 1, **Kohonen** teaches a <u>video processing apparatus</u> comprising:

A) <u>a memory configured to store a set of distinct information items</u> (Page 575, Section

B, Figures 5-6)<u>; and</u>

B) <u>an</u> information retrieval system in which <u>the</u> set of distinct information items map to

respective nodes in an array of nodes by mutual similarity of the information items, so

that similar information items map to nodes at similar positions in the array of nodes

(Page 574, Figures 5-6), the <u>information retrieval</u> system <u>includes</u>:

C) a user control <u>configured to define</u> a search criterion for selecting information items

(Kohonen, Page 584, Figure 6);

D) a detector <u>configured to detect</u> those positions within the array of nodes

corresponding to the selected information items (Kohonen, Page 584, Figures 5-6); and

E) a graphical user interface <u>configured to display</u> display points which are at positions

within a display area on a user display (Kohonen, Page 584, Figures 5-6).

The examiner notes that **Kohonen** teaches "<u>**a memory configured to store a**</u>

<u>**set of distinct information items**</u>" as "develop the final software for our method"

(Page 575, Section B) and "our system operate in real time and fit medium-sized.

computers" (Page 575, Section B). The examiner further notes that **Kohonen** teaches

"<u>**an**</u> **information retrieval system in which** <u>**the**</u> **set of distinct information items**

map to respective nodes in an array of nodes by mutual similarity of the

information items, so that similar information items map to nodes at similar

positions in the array of nodes" as "documents are presented as points on a two-

dimensional (2-D) plane and the geometric relations of the image points of the

documents represent their similarity relations" (Page 574). The examiner further notes

that **Kohonen** teaches "**a user control** <u>**configured to define**</u> **a search criterion for**

selecting information items" as "keyword search" (Page 584). The examiner further

notes that Figure 6 describes an interface which displays retrieved search results based

on the search constraint. The examiner further notes that **Kohonen** teaches "**a**

detector <u>**configured to detect**</u> **those positions within the array of nodes**

corresponding to the selected information items" as the retrieved results depicted in

Figure 6. The examiner further notes that **Kohonen** teaches "**a graphical user**

interface **configured to display** **display points which are at positions within a**

display area on a user display" as the retrieved results depicted in Figure 6.

Kohonen does not explicitly teach:

F) a video processing apparatus; and

G) the graphical user interface also displaying in a sequence in time a plurality of

representations of the selected information items.

Derthick, however, teaches **"a video processing apparatus"** as "video

retrieval, our current interfaces segment video into shots, and represent them with

single frames" (Page 1,Section 1, Figure 1) and **"the graphical user interface also**

displaying in a sequence in time a plurality of representations of the selected

information items" as "RSVP slideshow" (Page 1, Section 2) and Figure 1.

The examiner notes that Figure 1 depicts an RSVP image show on an graphical

user interface.

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of the cited references because teaching

Derthick's would have allowed **Kohonen's** to provide a method for having an efficient

multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick**

(Abstract).

Regarding claim 2, **Kohonen** further teaches a video processing apparatus

comprising:

A) wherein the graphical user interface is operable to display a two-dimensional display

array of said display points (Page 574, Figures 5-6).

The examiner notes that **Kohonen** teaches **"wherein the graphical user**

interface is operable to display a two-dimensional display array of said display

points" as "documents are presented as points on a two-dimensional (2-D) plane and

the geometric relations of the image points of the documents represent their similarity

relations" (Page 574).

Regarding claim 3, **Kohonen** further teaches a video processing apparatus

comprising:

A) in which the mapping between information items and nodes in the array includes a

dither component so that substantially identical information items tend to map to closely

spaced but different positions in the array (Page 584, Figures 5-6).

The examiner notes that the Figure 6 of **Kohonen** depicts very similar topics

closely coupled together in the large grid.

Regarding claim 4, **Kohonen** further teaches a video processing apparatus

comprising:

A) in which the information items are mapped to nodes in the array on the basis of a

feature vector derived from each information item (Page 574, Abstract).

The examiner notes that **Kohonen** teaches **"in which the information items**

are mapped to nodes in the array on the basis of a feature vector derived from

each information item" as "the feature vectors for the documents statistical

representations of their vocabularies are used" (Page 574, Abstract) and "Any of the

basic projection methods can be used to organize textual data items, such as

documents, if their contents are described statistically as some kind of metric feature

vectors" (Page 574, Section B).

Regarding claim 5, **Kohonen** further teaches a <u>video processing apparatus</u>

comprising:

A) in which the feature vector for an information item represents a set of frequencies of

occurrence, within that information item, of each of a group of information features

(Pages 576, 581).

The examiner notes that **Kohonen** teaches **"in which the feature vector for an**

information item represents a set of frequencies of occurrence, within that

information item, of each of a group of information features" as "in the basic

vector-space model [38] the stored documents are represented as real vectors in which

each component corresponds to the frequency of occurrence of a particular word in the

document" (Page 576, Section A).

Regarding claim 6, **Kohonen** further teaches a <u>video processing apparatus</u>

comprising:

A) in which the information items comprise textual information, the feature vector for an information item represents a set of frequencies of occurrence, within that information item, of each of a group of words (Pages 576, 581).

The examiner notes that **Kohonen** teaches **"in which the information items comprise textual information, the feature vector for an information item represents a set of frequencies of occurrence, within that information item, of each of a group of words"** as "in the basic vector-space model [38] the stored documents are represented as real vectors in which each component corresponds to the frequency of occurrence of a particular word in the document" (Page 576, Section A).

Regarding claim 7, **Kohonen** further teaches a <u>video processing apparatus</u> comprising:

A) in which the information items comprise textual information, the nodes being mapped by mutual similarity of at least a part of the textual information (Page 575).

The examiner notes that **Kohonen** teaches **"in which the information items comprise textual information, the nodes being mapped by mutual similarity of at least a part of the textual information"** as "The models are produced by a learning process that automatically orders them on the 2-D grid along with their mutual similarity" (Page 575, Section II).

Regarding claim 9, **Kohonen** further teaches a <u>video processing apparatus</u>

comprising:

A) in which the information items are pre-processed for mapping by excluding words

occurring with less than a threshold frequency amongst the set of information items

(Page 581).

The examiner notes that **Kohonen** teaches **"in which the information items**

are pre-processed for mapping by excluding words occurring with less than a

threshold frequency amongst the set of information items" as "The words occurring

less than 50 times in the whole corpus, as well as set of common words in a stopword

list of 1335 words were removed" (Page 581, Section A).

Regarding claim 10, **Kohonen** further teaches a <u>video processing apparatus</u>

comprising:

A) search means for carrying out a search of the information items (Page 584, Figures

5-6);

B) the search means and the graphical user interface being arranged to co-operate so

that only those display points corresponding to information items selected by the search

are displayed on the user display (Page 584, Figures 5-6).

The examiner notes that **Kohonen** teaches **"search means for carrying out a**

search of the information items" as "The words occurring less than 50 times in the

whole corpus, as well as set of common words in a stopword list of 1335 words were

removed" (Page 581, Section A). The examiner further notes that Figure 6 describes an

interface which displays retrieved search results based on the search constraint. The examiner further notes that **Kohonen** teaches **"the search means and the graphical user interface being arranged to co-operate so that only those display points corresponding to information items selected by the search are displayed on the user display"** as the retrieved results depicted in Figure 6 of **Kohonen**.

Regarding claim 11, **Kohonen** does not explicitly teach a <u>video processing apparatus</u> comprising:

A) wherein the said sequence in time is a serial visual presentation of the said representations.

Derthick, however, teaches **"wherein the said sequence in time is a serial visual presentation of the said representations"** as "Rapid Serial Visual Presentation" (Page 1, Abstract) and Figure 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

Regarding claim 14, **Kohonen** does not explicitly teach a <u>video processing apparatus</u> comprising:

A) wherein a plurality of streams of representations are displayed at the same time in respective display zones.

Derthick, however, teaches **"wherein a plurality of streams of representations are displayed at the same time in respective display zones"** as "Rapid Serial Visual Presentation" (Page 1, Abstract), "large image grid was continuously visible for SD" (Page 1, Section 2) and Figure 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

Regarding claim 15, **Kohonen** further teaches a <u>video processing apparatus</u> comprising:

A) a further user control for selecting a said representation, and causing the display of information related to the selected representation (Page 584, Figures 5-6).

Regarding claim 16, **Kohonen** does not explicitly teach a <u>video processing apparatus</u> comprising:

A) wherein the said representation comprise images.

Derthick, however, teaches **"wherein the said representation comprise images"** as "query image" (Page 1,Section 2, Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

Regarding claim 17, **Kohonen** does not explicitly teach a <u>video processing apparatus</u> comprising:

A) where the said representations comprise text.

Derthick, however, teaches **"where the said representations comprise text"** as "query text" (Page 1, Section 2, Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia and text retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

Regarding claim 18, **Kohonen** further teaches a <u>video processing apparatus</u> comprising:

A) wherein the said representation comprises links to the information items represented thereby (Page 583, Figures 5-6).

The examiner notes that **Kohonen** teaches **"wherein the said representation comprises links to the information items represented thereby"** as "clicking a point on the map display with a mouse, links to the document database, enable reading the contents of the documents" (Page 583, Figures 5-6).

The examiner notes that "clicking a point on the map display with a mouse, links to the document database, enable reading the contents of the documents" (Page 583, Figures 5-6) is analogous to **"wherein the said representation comprises links to the information items represented thereby"**.

Regarding claim 19, **Kohonen** does not explicitly teach a <u>video processing apparatus</u> comprising:

A) A portable data processing device comprising a <u>video processing apparatus</u> according to claim 1.

Derthick, however, teaches **"A portable data processing device comprising a video processing apparatus according to claim 1"** as "palmtop interfaces" (Page 1,Section 2, Figure 1) and "video retrieval, our current interfaces segment video into shots, and represent them with single frames" (Page 1,Section 1, Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

Regarding claim 20, **Kohonen** does not explicitly teach a <u>video processing</u>

<u>apparatus</u> comprising:

A) Video acquisition and/or processing apparatus comprising a <u>video processing</u>

<u>apparatus</u> according to claim 1.

Derthick, however, teaches **"Video acquisition and/or processing apparatus**

comprising a <u>video processing apparatus</u> according to claim 1" as "video

retrieval, our current interfaces segment video into shots, and represent them with

single frames" (Page 1,Section 1, Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of the cited references because teaching

Derthick's would have allowed **Kohonen's** to provide a method for having an efficient

multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick**

(Abstract).

Regarding claim 21, **Kohonen** teaches a method comprising:

A) in which a set of distinct information items map to respective nodes in an array of

nodes by mutual similarity of the information items, so that similar information items

map to nodes at similar positions in the array of nodes (Page 574, Figures 5-6);

B) defining a search criterion for selecting information items (Page 584, Figures 5-6);

C) detecting those positions within the array of nodes corresponding to the selected

information items (Page 584, Figures 5-6); and

D) displaying display points which are at positions within a display area on a user display corresponding to the selected information items (Page 584, Figures 5-6).

The examiner notes that **Kohonen** teaches **"in which a set of distinct information items map to respective nodes in an array of nodes by mutual similarity of the information items, so that similar information items map to nodes at similar positions in the array of nodes"** as "documents are presented as points on a two-dimensional (2-D) plane and the geometric relations of the image points of the documents represent their similarity relations" (Page 574). The examiner further notes that **Kohonen** teaches **"defining a search criterion for selecting information items"** as "keyword search" (Page 584). The examiner further notes that Figure 6 describes an interface which displays retrieved search results based on the search constraint. The examiner further notes that **Kohonen** teaches **"detecting those positions within the array of nodes corresponding to the selected information items"** as the retrieved results depicted in Figure 6. The examiner further notes that **Kohonen** teaches **"displaying display points which are at positions within a display area on a user display corresponding to the selected information items"** as the retrieved results depicted in Figure 6.

Kohonen does not explicitly teach:

E) a video processing apparatus; and

F) the graphical user interface also displaying in a sequence in time a plurality of representations of the selected information items.

Derthick, however, teaches **"a video processing apparatus"** as "video

retrieval, our current interfaces segment video into shots, and represent them with

single frames" (Page 1,Section 1, Figure 1) and **"the graphical user interface also**

displaying in a sequence in time a plurality of representations of the selected

information items" as "RSVP slideshow" (Page 1, Section 2) and Figure 1.

The examiner notes that Figure 1 depicts an RSVP image show on an graphical

user interface.

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of the cited references because teaching

Derthick's would have allowed **Kohonen's** to provide a method for having an efficient

multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick**

(Abstract).

Regarding claim 22, **Kohonen** further teaches a method comprising:

A) wherein the step of displaying displays a two-dimensional display array of said

display points (Page 574, Figures 5-6).

The examiner notes that **Kohonen** teaches **"wherein the step of displaying**

displays a two-dimensional display array of said display points" as "documents

are presented as points on a two-dimensional (2-D) plane and the geometric relations of

the image points of the documents represent their similarity relations" (Page 574).

Regarding claim 23, **Kohonen** does not explicitly teach a method comprising:

A) wherein the said sequence in time is a serial visual presentation of the said representations.

Derthick, however, teaches **"wherein the said sequence in time is a serial visual presentation of the said representations"** as "Rapid Serial Visual Presentation" (Page 1, Abstract) and Figure 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

Regarding claim 24, **Kohonen** further teaches a method comprising:

A) a further user control for selecting a said representation, and causing the display of information related to the selected representation (Page 584, Figures 5-6).

Regarding claim 25, **Kohonen** further teaches a method comprising:

A) Computer software having program code for carrying out a method according to claim 21 (Page 575, Section B, Figures 5-6).

The examiner notes that **Kohonen** teaches **"Computer software having program code for carrying out a method according to claim 21"** as "develop the final software for our method" (Page 575, Section B) and "our system operate in real time and fit medium-sized computers" (Page 575, Section B).

Regarding claim 26, **Kohonen** further teaches a method comprising:

A) A <u>storage</u> medium for providing program code according to claim 25 (Page 575, Section B, Figures 5-6).

The examiner notes that **Kohonen** teaches **"A <u>storage</u> medium for providing program code according to claim 25"** as "develop the final software for our method" (Page 575, Section B) and "our system operate in real time and fit medium-sized computers" (Page 575, Section B).

Regarding claim 27, **Kohonen** further teaches a method comprising:

A) A medium according to claim 26, the medium being a storage medium (Page 575, Section B, Figures 5-6).

The examiner notes that **Kohonen** teaches **"A medium according to claim 26, the medium being a storage medium"** as "develop the final software for our method" (Page 575, Section B) and "our system operate in real time and fit medium-sized computers" (Page 575, Section B).

Regarding claim 29, **Kohonen** teaches a interface comprising:

A) <u>a memory that stores a set of distinct information items</u> (Page 575, Section B, Figures 5-6); <u>and</u>

B) an information retrieval system in which a set of distinct information items map to respective nodes in an array of nodes by mutual similarity of the information items, so

that similar information items map to nodes at similar positions in the array of nodes

(Page 574, Figures 5-6)

C) a user control for defining a search criterion for selecting information items (Page

584, Figure 6); and

D) a graphical user interface having a display area arranged to display points which are

at positions within a display area corresponding to the selected information items (Page

584, Figures 5-6).

The examiner notes that **Kohonen** teaches "**a memory that stores a set of**

distinct information items" as "develop the final software for our method" (Page 575,

Section B) and "our system operate in real time and fit medium-sized computers" (Page

575, Section B). The examiner further notes that **Kohonen** teaches "**an information**

retrieval system in which a set of distinct information items map to respective

nodes in an array of nodes by mutual similarity of the information items, so that

similar information items map to nodes at similar positions in the array of nodes"

as "documents are presented as points on a two-dimensional (2-D) plane and the

geometric relations of the image points of the documents represent their similarity

relations" (Page 574). The examiner further notes that **Kohonen** teaches "**a user**

control for defining a search criterion for selecting information items" as "keyword

search" (Page 584). The examiner further notes that Figure 6 describes an interface

which displays retrieved search results based on the search constraint. The examiner

further notes that **Kohonen** teaches "**a graphical user interface having a display**

area arranged to display points which are at positions within a display area

corresponding to the selected information items" as the retrieved results depicted in

Figure 6.

Kohonen does not explicitly teach:

E) a video processing apparatus; and

F) a display area arranged to display in a sequence in time a plurality of

representations of the selected information items.

Derthick, however, teaches **"a video processing apparatus"** as "video

retrieval, our current interfaces segment video into shots, and represent them with

single frames" (Page 1,Section 1, Figure 1) and **"a display area arranged to display**

in a sequence in time a plurality of representations of the selected information

items" as "RSVP slideshow" (Page 1, Section 2) and Figure 1.

The examiner notes that Figure 1 depicts an RSVP image show on an graphical

user interface.

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of the cited references because teaching

Derthick's would have allowed **Kohonen's** to provide a method for having an efficient

multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick**

(Abstract).

Regarding claim 30, **Kohonen** further teaches a interface comprising:

A) wherein graphical user interface displays a two-dimensional display array of said

display points (Page 574, Figures 5-6).

The examiner notes that **Kohonen** teaches **"wherein graphical user interface displays a two-dimensional display array of said display points"** as "documents are presented as points on a two-dimensional (2-D) plane and the geometric relations of the image points of the documents represent their similarity relations" (Page 574).

Regarding claim 31, **Kohonen** does not explicitly teach a interface comprising:

A) wherein the said sequence in time is a serial visual presentation of the said representations.

Derthick, however, teaches **"wherein the said sequence in time is a serial visual presentation of the said representations"** as "Rapid Serial Visual Presentation" (Page 1, Abstract) and Figure 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

Regarding claim 32, **Kohonen** further teaches a interface comprising:

A) a further user control for selecting a said representation, and causing the display of information related to the selected representation (Page 584, Figures 5-6).

Regarding claim 33, **Kohonen** further teaches a interface comprising:

A) a user control for applying further search criteria to the search (Pages 583-584,

Figures 5-6).

The examiner notes that **Kohonen** teaches **"a user control for applying**

further search criteria to the search" as "If the map is large, subsets of it can first be

viewed by zooming" (Pages 583, Section E).

Regarding claim 34, **Kohonen** does not explicitly teach a interface comprising:

A) a presentation control for controlling the presentation of the said sequence of

representations.

Derthick, however, teaches **"a presentation control for controlling the**

presentation of the said sequence of representations" as "very large scrollbar"

(Page 1, Section 2, Figure 1) and "countdown timer" (Page 1, Section 2, Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of the cited references because teaching

Derthick's would have allowed **Kohonen's** to provide a method for having an efficient

multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick**

(Abstract).

9.   Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Kohonen**

et al. (Article entitled "Self Organization of a Massive Document Collection") and in view

of **Derthick** (Article entitled "Interfaces for Palmtop Image Search") as applied to claims

1-7, 9-11, and 14-27, and 29-34, and further in view of **Doerre et al.** (U.S. Patent 6,446,061).

10.   Regarding claim 8, **Kohonen** and **Derthick** do not explicitly teach a <u>video processing apparatus</u> comprising:

A) in which the information items are pre-processed for mapping by excluding words occurring with more than a threshold frequency amongst the set of information items.

Doerre, however, teaches **"in which the information items are pre-processed for mapping by excluding words occurring with more than a threshold frequency amongst the set of information items"** as a solution to this problem the invention suggests to use names, terms, and general words, but to apply filtering to remove high-frequency terms and very low-frequency terms (Column 18, lines 45-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** and **Doerre's** would have allowed **Kohonen's** to provide a method to prevent cluster coherence at the expense of meaningful cluster descriptors, as noted by **Doerre** (Column 18, lines 41-44).

11.   Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kohonen et al.** (Article entitled "Self Organization of a Massive Document Collection") and in view of **Derthick** (Article entitled "Interfaces for Palmtop Image Search") as applied to claims 1-7, 9-11, and 14-27, and 29-34, and further in view of **Bruijn et al.** (Article entitled "Patterns of Eye Gaze during Rapid Serial Visual Presentation").

12.   Regarding claim 12, **Kohonen** and **Derthick** do not explicitly teach a <u>video</u>

<u>processing apparatus</u> comprising:

A) wherein the said representations are displayed one at a time in sequence in the

same display zone.

   Bruijn, however, teaches **"wherein the said representations are displayed**

one at a time in sequence in the same display zone" as "Keyhole RSVP" (Pages 1-

2, Section I) and "We use the term Keyhole RSVP when all the images appear, in rapid

sequence, in the same location at the same size" (Pages 1-2, Section I).

   It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of the cited references because teaching

Derthick's and **Bruijn's** would have allowed **Kohonen's** to provide a method for

multiple ways to express different RSVP configurations.

   Regarding claim 13, **Kohonen** and **Derthick** do not explicitly teach a <u>video</u>

<u>processing apparatus</u> comprising:

A) wherein a plurality of said representations are displayed at the same time in

respective display zones.

   Bruijn, however, teaches **"wherein a plurality of said representations are**

displayed at the same time in respective display zones" as "Collage RSVP" (Page

2, Section I) and "a set of images being deposited, in rapid sequence, on a table top in

such a way that five or six are visible at any one time" (Page 2, Section I).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of the cited references because teaching

Derthick's and **Bruijn's** would have allowed **Kohonen's** to provide a method for

multiple ways to express different RSVP configurations.

Response to Arguments

13.   Applicant's arguments filed on 09/08/2006 have been fully considered but they

are not persuasive.

Applicant goes on to argue on page 18, that **"Moreover, it is respectfully**

submitted that neither Figures 5 nor 6 of Kohonen et al. describes the detection

of positions within the array of nodes. Rather, Kohonen et al. merely describes

which node has a large number of relevant subsections". However, the examiner

wishes to point to Figures 5-6 of **Kohonen**. The examiner further wishes to state that

the aforementioned figures clearly display search results that are distinguished by the

size of circles (see "the best matching locations are marked with circles" (Page 582)) in

order to pictorially depict the best search results. The examiner further wishes to state

that **Kohonen's** method clearly must detect positions in order to rank them for search

results.

Applicant goes on to argue on page 18, that **"Moreover, Kohonen et al. is**

directed towards document collection that do not include dynamic parts, and

consequently would not have a need for sequential display of representations of

the items". In response to applicant's argument that the references fail to show certain

features of applicant's invention, it is noted that the features upon which applicant relies

(i.e., "do not include dynamic parts") are not recited in the rejected claim(s). Although

the claims are interpreted in light of the specification, limitations from the specification

are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057

(Fed. Cir. 1993).

Applicant goes on to argue on page 18, that **"Moreover, an advantage with the**

invention defined by Claim 1 is that be embodying a non-linear referencing

mechanism...it is based on the self organization of documents". In response to

applicant's argument that the references fail to show certain features of applicant's

invention, it is noted that the features upon which applicant relies (i.e., "Kohonen et al.

neither teaches nor suggest such features related to a video processing apparatus...of

documents") are not recited in the rejected claim(s). Although the claims are interpreted

in light of the specification, limitations from the specification are not read into the claims.

See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant goes on to argue on page 19, that **"Assuming *arguendo* that**

Derthick does disclose a graphical user interface as claimed, it is respectfully

submitted that one or ordinary skill in the art would not reasonably believe that

the graphical user interface in Derthick could be combined with the self

organization in Kohonen et al. to arrive at the presently claimed

invention...Therefore the combination of RSVP on SOM is not something that is

taught or suggested in the references themselves, nor would one of ordinary skill

in the art have recognized the possibility for making such as combination". In

response to applicant's argument that there is no suggestion to combine the references,

the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to configure the controller of Nilsen by applying the teachings of Subramanyam and Smith, III as indicated above, to enhance its performance. It would have been obvious to evaluate the information regarding the I/O operations to distribute the loads to the database server and to cache the information at the controller because Smith, III teaches that the I/O operations constitute a major portion of OLTP workload and thus caching the I/O operations would help avoid expensive disk accesses (Smith, III, col. 2, lines 30-32).

In response to applicant's argument on pages 4 and 6, *a prima facie case of obviousness* is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art. Once such a case is established, it is incumbent upon appellant to go forward with objective evidence of unobviousness. In re Fielder, 471 F.2d 640, 176 USPQ 300 (CCPA 1973).

Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification.

Interpretation of Claims-Broadest Reasonable Interpretation

During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

Reference is made to MPEP 2144.01 - Implicit Disclosure

"[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968)

Subsequent to an analysis of the claims it was revealed that a number of limitations recited in the claims belong in the prior art and thus encompassed and/or implicitly disclosed in the reference (s) applied and cited. It is logical for the examiner to focus on the limitations that are "crux of the invention" and not involve a lot of energy and time for the things that are not central to the invention, but peripheral. The examiner is aware of the duties to address each and every element of claims, however, it is also important that a person prosecuting a patent application before the Office or an stakeholders of patent granting process make effort to understand the level of one of ordinary skill in the (data processing) art or the level one of skilled in the (data processing) art, as encompassed by the applied and cited references. The administrative convenience derived from such a cooperation between the attorneys and examiners benefits the Office as well the patentee.

In view of the above, the examiner contends that all limitations as recited in the claims have been addressed in this Action.

For the above reasons, Examiner believed that rejection of the last Office action was proper.

In response to applicant's argument, to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

"Test of obviousness is not whether features of secondary reference may be bodily incorporated into primary reference's structure, nor whether claimed invention is expressly suggested in any one or all of references; rather, test is what combined teachings of references would have suggested to those of ordinary skill in art."

In re Keller, Terry, and Davies, 208 USPQ 871 (CCPA 1981).

"Reason, suggestion, or motivation to combine two or more prior art references in single invention may come from references themselves, from knowledge of those skilled in art that certain references or disclosures in references are known to be of interest in particular field, or from nature of problem to be solved;" Pro-Mold and Tool Co. v. Great Lakes Plastics Inc. U.S. Court of Appeals Federal Circuit 37 USPQ2d 1626 Decided February 7, 1996 Nos. 95-1171, -1181

"[q]uestion is whether there is something in prior art as whole to suggest

desirability, and thus obviousness, of making combination." Lindemann Maschinenfabrik

GMBH v. American Hoist and Derrick Company et al. U.S. Court of Appeals Federal

Circuit 221 USPQ 481 Decided Mar. 21, 1984 No 83-1178.

Applicant goes on to argue on page 19, that **"Moreover, a video processing**

apparatus, using the presently claimed invention, would have the advantage of

considering the dynamic aspects associated with video. Kohonen et al. is simply

not directed to such an application and therefore would not have the need, nor

the motivation, to be modified to incorporate a sequence in "time" of a plurality of

representation of the selected information items ". In response to applicant's

argument that there is no suggestion to combine the references, the examiner

recognizes that obviousness can only be established by combining or modifying the

teachings of the prior art to produce the claimed invention where there is some

teaching, suggestion, or motivation to do so found either in the references themselves

or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*,

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ordinary skill in the (data processing) art or the level one of skilled in the (data

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Applicant goes on to argue on page 19, that **"Moreover, documents are static, unlike video which is dynamic"**. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "video which is dynamic") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

14.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. PGPUB 2003/0208485 issued to **Castellanos** on 06 November 2003. The subject matter disclosed therein is pertinent to that of claims 1-34 (e.g., methods to use SOM mapping).

U.S. Patent 7,017,186 issued to **Day** on 21 March 2006. The subject matter disclosed therein is pertinent to that of claims 1-34 (e.g., methods to use SOM mapping).

U.S. PGPUB 2005/0027704 issued to **Hammond et al.** on 03 February 2005. The subject matter disclosed therein is pertinent to that of claims 1-34 (e.g., methods to use preprocess words from documents).

U.S. Patent 5,864846 issued to **Voorhees et al.** on 26 January 1999. The subject matter disclosed therein is pertinent to that of claims 1-34 (e.g., methods to use preprocess words from documents).

15.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Contact Information

16.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Mahesh Dwivedi whose telephone number is (571) 272-

2731. The examiner can normally be reached on Monday to Friday 8:20 am – 4:40 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tim Vo can be reached (571) 272-3642. The fax number for the

organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

TIM VO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Mahesh Dwivedi

Patent Examiner

Art Unit 2168

November 15, 2006

Leslie Wong LW

Primary Examiner